



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/045,799	03/23/1998	HIDEYUKI HAYASHI		1410

7590 08-07/2003

SUGHRUE MION ZINN MACPEAK & SEAS
2100 PENNSYLVANIA AVENUE N W
WASHINGTON, DC 20037

EXAMINER

TAMAI, KARL I

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/045,799

Applicant(s)

HAYASHI ET AL.

Examiner

Tamai IE Karl

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-14 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-14 and 21-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 1998 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Newly submitted claims 24-26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the apparatus can be made by other materially different methods such as: without stamping the sheet metal or without cutting the wires.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 24-26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: end portions of the wires.

3. The amendment filed 6/3/2003 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: deformation preventer 62 is disposed at least partially over the end portions of wire is new matter. The specification does not provide any written description of the end portions of the wire in

Art Unit: 2834

regards to the deformation preventer and the drawings do not clearly show the relationship of the end portion of the wire in regards to the deformation preventer.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the end portions of the wires, the deformation preventer being flush with the end portion, and the vertical and horizontal extension of the deformation preventer must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-6, 9-14, and 21-23 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The specification does

Art Unit: 2834

not have a full, clear, concise, and exact written description of the end portions of the wires, in fact the specification does not have any written description of the end portions of the conductors or the deformation preventer being flush with the end portions of the conductor.

In regards to claim 21-23 the specification does not have a written description of the deformation preventer extending vertical and horizontal to the top and bottom surfaces of the conductor or the end portions of the wires. The examiner will assume the vertical and horizontal directions are along traverse across the wire and along the longitudinal edge (as shown in Peterson), but there is no support in the specification for the deformation preventer extending vertical and horizontal to the conductor.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-6 9-14, and 21-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims do not particularly point out and distinctly claim the metes and bounds of the invention because it is unclear what constitutes the "end portion" of the wires.

Claim Rejections - 35 USC § 102

9. The rejection of Claims 1-4 under 35 U.S.C. 102(b) as being clearly anticipated by Waratani et al.(Waratani)(JP 4-64414) is withdrawn.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al.(Waratani)(JP 4-64414) and Peterson et al. (Peterson) (US 4,954,872). Waratani teaches a conductor with an outer frame 16 and a wiring section 1, where the wiring section having a deformation preventer 2 under the resin 3. The deformation preventer extends along the flat end portion of the wires so as to extend between the wires and prevent deformation when the second resin (coating of claim 21) is applied to the wires. Waratani teaches every aspect of the invention except the deformation preventer flush with the edge of the wire. Peterson teaches the deformation preventer flush with the longitudinal end of the wire to prevent deformation of the wires during molding. It would have been obvious to a person of ordinary skill in the art at the time of the invention to construct the insert conductor of Waratani with the deformation preventer flush with the wires as in Peterson to prevent deformation of the wires during molding.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al. (Waratani)(JP 4-64414) and Peterson et al. (Peterson) (US 4,954,872), in further

Art Unit: 2834

view of Huber (US 4,845,396). Waratani and Peterson teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of Waratani and Peterson in a brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body.

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Waratani et al. (Waratani)(JP 4-64414) and Peterson et al. (Peterson) (US 4,954,872), in further view of Yoshida (JP 4-64414). Waratani and Peterson teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshida teaches that polyphenylene sulfide is used in is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of Waratani and Peterson with the deform preventer made of polyphenylene sulfide resin because Yoshida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property, and because it has been held that it is within the ordinary skill in the art to select a know material on the basis of suitability for the intended use (see *In re Leshin*, 125 USPQ 416).

Art Unit: 2834

14. Claims 9-11, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art and Waratani et al. (Waratani)(JP 4-64414). The Applicant's admitted prior art teaches every aspect of the invention, as discussed above, except an insulating member to prevent the conductor from being deformed by resin injection during the resin molding. Waratani teaches an insulating member 2 applied to both surfaces of the conductor to prevent the conductor from being deformed by resin injection during the resin molding. It is inherent that the longitudinal deformation of the wires is prevented by connecting adjacent wires with insulator 2, where the insulator extends across the wire and along the wire (vertical and horizontal). It would have been obvious to a person skilled in the art at the time of the invention to construct the brush holder of the Applicant's admitted prior art with the premold of Waratani to support the conductor within the resin mold during the injection molding process.

15. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) and Waratani et al.(Waratani)(JP 4-64414), in further view of Huber (US 4,845,396). AAPA and Waratani teach every aspect of the invention, as discussed above, except the insert conductor and plastic plate deform preventer used in as a connector in a brush holder. Huber teaches an insert conductor molded in a brush holder. It would have been obvious to a person skilled in the arts at the time of the invention to construct the insert conductor of AAPA and Waratani in a

Art Unit: 2834

brush holder because Huber teaches that insert conductors with are molded into brush holders to form an integrated body.

16. Claims 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art(AAPA) and Waratani et al.(Waratani)(JP 4-64414), in further view of Yoshida (JP 4-64414). Waratani and AAPA teach every aspect of the invention, as discussed above, except the deformation preventer composed of polyphenylene sulfide resin. Yoshida teaches that polyphenylene sulfide is used in is used in integrated circuits as an insulating layer. It would have been obvious to a person skilled in the art at the time of the invention to construct the insert conductor of AAPA and Waratani with the deform preventer made of polyphenylene sulfide resin because Yoshida teaches that polyphenylene sulfide resin provides good adhesion and a firm adhesive property.

Response to Arguments

17. Applicant's arguments filed 6/3/2003 have been fully considered but they are not persuasive.

The Applicant's argument that figures 1 and 3 show the the deformation preventer is flush with the end of the conductor is not persuasive. The drawings show conductor 63 intersecting the deformation preventer 62, but does not show the end of the conductor 63 being flush with the end of the deformation preventer 62. The limitation is new matter because there is no support in the specification or the drawings for the limitation of the end of the conductor being covered by the deformation preventer

or the end of the conductor being flush with the deformation preventer. The will allow the specification to be amended to include the limitation of the deformation preventer extending vertically and horizontally across the conductor, but there is not support in the specification detailing or showing the end of the conductors in regards to the deformation preventer, therefore the new matter rejection is sustained. The Applicant's arguments regarding figures 1 and 3 are not persuasive because it is unclear from the drawings whether the conductor extends under the deformation preventer at the ends of the conductor.

The Applicant's arguments regarding Waratani not teaching the deformation preventer flush with the ends of the conductor is not persuasive. Waratani shows in figure 4 that the deformation preventer 32 is flush with the longitudinal end of the conductor 36. The Applicant's argument that the dependent claims are allowable because the independent claim 1 is allowable is not persuasive because Claim 1 is properly rejected.

The Applicant's argument that neither the AAPA or Waratani teach the deformation preventer extending over the end portions of the wire. The examiner disagrees. The examiner notes that neither the claims nor the specification defines what is considered the end portions of the wire such that Waratani teaches the deformation preventer extending laterally across the conductor to the longitudinal end portions of the flat wire to prevent deformation during molding. The Applicant's arguments regarding the middle portion of Waratani is not persuasive because the claim

does not define which end portion of the wire is prevented from deformation. The rejection is proper and maintained.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl I.E. Tamai whose telephone number is (703) 305-7066.

The examiner can be normally contacted on Monday through Friday from 8:00 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Nestor Ramirez, can be reached at (703) 308-1371. The facsimile number for the Group is (703) 305-3432. Any inquiry of a general nature or

Art Unit: 2834

relating to the status of this application or proceeding should be directed to the Group
receptionist whose telephone number is (703) 308-0956.

Karl I Tamai
PRIMARY PATENT EXAMINER
August 4, 2003



KARL TAMAI
PRIMARY EXAMINER